

Bacton to Walcott Coastal Management Scheme - Landscaping

Public Drop in Events 12 & 13 July 2017 – Summary Report

Objective

- Introduce and raise understanding and awareness of the Bacton to Walcott Coastal Management Scheme with the wider public.
- Begin Environmental Impact Assessment stakeholder engagement
- Seek feedback and community contributions

Date/Location

- 12 July 2017 – Walcott Village Hall – 2pm – 8pm
- 13 July 2017 – Bacton Village Hall – 2pm – 8pm

Publicity

Posters and flyers advertising the events were located at key locations such as shops, cafes and in key locations on the seafront.

Parish Councillors were invited to a preview of the information (two attended) and were informed of the upcoming events.

Key local representatives received emails informing them of the events and inviting them to preview the information with a site visit at the North Norfolk Coastal Forum held on 10 July.

Please see Appendix 1 for example of flyer/poster advertising the event.

Session materials

The following materials were provided at the events.

- The following materials were available at each event:
- Boards providing information about scheme development, process and proposals.
- Booklet containing information about scheme development, process and proposals.
- Drawings of draft scheme proposal
- Film of delivery of a beach nourishment scheme
- Film of key project information and visualisation of the proposal
- Sand samples of differing sediment size.
- NNDC Coastal Management Information Leaflets
- FAQ sheet
- Proposal Questionnaire
- Feedback boards
- Contact Card

Please refer to Appendix 2 for examples

Indicative Photographs

Photographs of event set up at Walcott Village Hall.



Number of attendees

Over the two days it is estimated that between 160 and 200 people attended. This is based on 161 individuals signing in to the event and an estimation that a number of people attended without signing in.

The split of those signed in is detailed below:

- Walcott 94 attendees
- Bacton 67 attendees

Feedback board responses

Boards were provided as part of the display to seek feedback towards the event and the scheme.

Of those who attended who provided feedback on the boards it was overwhelmingly positive.

Key statements were:

- Bring it on
- Yes
- Make it happen

Feedback suggests that the information was well received and clear.

Feedback received from Walcott

Bacton to Walcott

Coastal Management Scheme



We value your feedback

Please place a sticker in response to the following questions:

	YES	NO	Don't Know
Did you find the information informative and easy to understand?	<p>Yes</p> <p>Very impressed by the way the information was presented and the staff were very helpful and easy to talk to. The project is a great idea and we hope it will be successful.</p> <p>YES</p>		
Did you find the feedback helpful?	<p>Yes</p> <p>YES</p>	<p>NO</p>	
Did you find the staff helpful and were they easy to understand?	<p>Yes</p> <p>VERY HELPFUL</p> <p>STAFF - BRILLIANT</p> <p>at</p> <p>you</p>		
Do you have any other comments?	<p>MAKE HARRIS</p> <p>TRUST IT GOES FORWARD</p> <p>Go For it ASAP!</p> <p>Just Do</p> <p>Hope that IT HAPPENS Soon.</p> <p>Please let this happen!</p>		<p>Brilliant!</p> <p>Make it happen</p>

Feedback received from Bacton

Bacton to Walcott

Coastal Management Scheme



We value your feedback

Please place a sticker in response to the following questions:

	YES	NO	Don't Know
Did you find the information informative and easy to understand?			
Did you give feedback?			
Did you find the staff helpful and were they easy to understand?			

Do you have any other comments?

Bring it on!

the sooner the better!

over and

Questionnaire

Questionnaires were available at each event and also available online.

In total 157 questionnaires were completed between July 12 to September 19 2017.

A summary of information is provided in Appendix 3.

Key responses:

- The majority of responses stated they use the beach and walkways throughout the year
- The main uses are walking, beach activities, swimming, however, there was a diverse mix of other responses.
- The area is used for commercial and recreational fishing.
- There is wide usage of the coastal frontage, with 26% using all the area, 22% Bacton village and 49% Walcott.
- There is a high (39%) proportion of daily use supported by a predominance of regular usage.
- The majority of responses stated that the construction of the scheme would not change their use of the area.
- There was a desire for more information as to how the scheme is to be constructed so that impacts in to usage could be understood.
- Of responses 56% suggested the scheme would not change their usage of the beach, 38% stated they would use it more. Further analysis of results may identify that no change of usage is due to the high daily use response.
- 50% of responses identified that the scheme would benefit the area, a further 28% commented. Please see appendix 3 for details of comments which include identification of potential impact of windblown sand, potential increases in traffic due to an increase in popularity, query as to how long it will last, concern that the promenade (note there is no promenade, this refers to the exposed sea wall apron) would not be usable.
- There was a wide spread of interest in the scheme with key areas being Bacton and Walcott Village.

Questions during events

The events provided a good opportunity for members of the public to ask questions regarding the proposal.

Key queries raised by members of the public were:

- Will it work?
- Will the sand be washed away?
- Where does the sand come from?
- How long will there be disruption if it is delivered?
- How will the proposal develop with regards to fisheries?

Media Release

Following the event, a media release was published, please see Appendix 4. The release resulted in overall positive coverage with only one notable negative reaction included in a letter to the editor.

Conclusion

Overall the Bacton to Walcott Coastal Management Scheme was well received by the public.

It was felt by the delivery team that the objectives of raising awareness and understanding of the coast and the proposal was achieved and that many queries were answered.

The format and timing of the events appears to have worked well and materials were well understood and received.

Due to the decisions which required to be made in the lead up to the event publicity occurred with only limited notice. Although this did not appear to negatively influence the number of representations, a limited number of comments were received post events of people who were not aware and therefore did not attend. All the information was made available online for those who could not attend.

Key feedback includes:

- Make it happen.
- Queries around are we sure it will work.
- Concerns around impact to fisheries.
- Recognition that there may be some disruption during placement.
- Some concerns regarding how the usage of the seawall/beach may change.

Moving forwards there could be further messages regarding:

- Progress
- How the scheme will be constructed
- How the scheme will change the frontage
- That beach levels will continue to vary and after initial placement they will initially drop
- Reassurance that the scheme will work, whilst still stating there is always a level of uncertainty.

Appendix 1 – Flyer/poster

Bacton to Walcott

Coastal Management Scheme

Public Drop-in Session

Find out more about the sandscaping proposals

- what it will mean for your area and how the scheme will work
- give your feedback on the scheme
- get regular updates on the scheme

12 July 2017 Walcott Village Hall 2pm to 8pm

13 July 2017 Bacton Village Hall 2pm to 8pm

coastal.management@north-norfolk.gov.uk



Appendix 2 – Example materials provided

Bacton to Walcott

Coastal Management Scheme

Questionnaire for Public Consultation Event

It would be very useful for us to understand a bit more about how you use the current area that could be affected by these proposals.

Please could you answer the following questions and provide any comments in the spaces provided. If you would like more information or would like to discuss the scheme further, please talk to one of the advisers present or contact **coastal.management@north-norfolk.gov.uk**

Name (optional):

Contact Details (optional):

I am mostly interested in (delete as appropriate) Paston / Bacton Terminal / Bacton / Walcott / Witton with Ridlington / Happisburgh / Other (please state)

Your details will be used for this purpose alone. If you would like to receive general updates and promotional information from NNDC please tick here.

QUESTION 1

Do you use the beach area and walkways along the frontage between the Bacton Terminal Area and Walcott stretch of coast?

Yes No

If so, is your use of this area seasonal?

- No, I don't use the beach area. Thank you for your input, no further questions.
- Yes, I use it throughout the year
- Yes, I use it more in the spring
- Yes, I use it more in the summer
- Yes, I use it more in the autumn
- Yes, I use it more in the winter

QUESTION 2

Which of the following activities do you undertake along the beach area?

- Walking
- Beach activities
- Swimming
- Sailing
- Fishing

Other

QUESTION 3

Do you use a particular stretch of the beach?

- No, I use all of this section of beach
- I mostly use the Bacton Terminal area
- I mostly use the Bacton Frontage
- I mostly use the Walcott Frontage

QUESTION 4

How often do you use the beach area?

- Once a year or less
- Once or twice a month
- Once or twice a week
- Daily

QUESTION 5

How would the construction works for the proposed scheme change your use of the beach area?

- No Change
- Use more
- Use less

Comments

QUESTION 6

How would the presence of the completed scheme change your use of the beach area?

- No change
- Use more
- Use less

QUESTION 7

Do you see any benefits or disadvantages with the proposed scheme

(please provide details where possible)?

- Benefits
- Disadvantages
- No change

Comments

Bacton to Walcott Coastal Management Scheme seeks to:

- Provide protection to the nationally important Bacton Gas Terminal which supplies up to one third of the UK gas supply
- Extend the life of the sea defences at Bacton and Walcott villages and reduce flooding where possible

The scheme must:

- Work within the Shoreline Management Plan policies
- Minimise any environmental impacts, including on the beaches downdrift, to ensure no significant negative effects overall
- Be able to obtain necessary consents and approvals e.g. Planning consent, Marine licence etc.
- Be deliverable within the funding available
- Work within the National Flood and Coastal Risk Management Guidance in order to get government funding

From this event we would like you to:

- Understand what is and is not possible
- Be aware of the process to obtain funds for a coast protection scheme
- Provide feedback on the proposal in order to help shape the scheme before consents are sought
- Understand what will happen next
- Help identify how the community can contribute to the scheme to help make it happen
- Find out how you can keep updated

How are coastal management schemes planned and funded?

- ▶ North Norfolk District Council funds approximately £310,000 each year to maintain 21 miles of coastal defences – that's £14,700 a mile per year. Over the past 10 years NNDC has invested over £1.3M on the Bacton to Walcott frontage.
- ▶ To obtain additional funding from central government when defences need more substantial work, a coast protection scheme must satisfy the Government's Flood and Coastal Erosion Risk Management Strategy, which includes the below.

Shoreline Management Plan

A Shoreline Management Plan is a policy document which outlines the risks posed by coastal change and how this should be managed. The plan provides a large scale assessment of the risks experienced by people and the environment, aiming to manage them in a sustainable way.

Bacton Terminal, Bacton and Walcott are included in the Kelling to Lowestoft Ness Shoreline Management Plan (SMP6). The policy for the Bacton Terminal frontage is to 'Hold the Line' for the operational life of the terminal. The SMP does however recognise the risk of wider coastal impacts and these must be addressed in coastal management proposals. A scheme for protection of Bacton Gas Terminal would always have to prevent any negative impacts to the Villages.

The policy for the villages of Bacton and Walcott is to continue to 'Hold the Line' for the short term as far as possible through the maintenance of the existing defences. It is recognised that this will become ever more difficult as time progresses as the beaches become lower and narrower. As defences fail, the policy will change (over time) to 'Managed Realignment', this may still allow actions being taken to slow erosion, provided these do not result in wider negative impacts.

Strategy Study

A Strategy Study concerns the practical implementation of the policies agreed within the Shoreline Management Plan and explores the potential for obtaining government funding.

Bacton and Walcott are included in the Cromer to Winterton Coastal Management Study which identified that a scheme for the Bacton to Walcott village frontage was not economically viable, however, following further investigation an opportunity to work alongside Bacton Gas Terminal was identified as being a likely way of delivering a coastal management scheme for the frontage, therefore this was pursued.

Partnership Funding for Flood and Coastal Erosion Risk Management Grant in Aid

Large scale coast protection schemes can potentially be wholly or partially funded through central government (via the Environment Agency). This is called Grant in Aid Partnership Funding, more information is provided in the display leaflets.

The benefits of a scheme - for example the number and value of the homes protected – determine how much Grant in Aid is potentially available. If the costs of the scheme are higher, then the resulting gap has to be filled with local funding, which could be from public or private sources.

Due to the rural nature of the North Norfolk coast, few locations are likely to receive full funding through Environment Agency Grant in Aid, however, it is indicated that Bacton and Walcott is potentially eligible for some funding.

Private & Public Funding

Bacton Gas Terminal is not eligible for government funding for coast protection and the Operators will need to provide the funding themselves.

In order to fund a scheme a mix of funding from the Environment Agency, North Norfolk District Council, Regional Flood and Coast Defence Committee and the Bacton Gas Terminal Operators is being put together. Other funding sources are also being explored, such as the Local Enterprise Partnership.

The Bacton Terminal Operators are considering financing the gap in funding for the villages scheme. Should additional funding be secured, through governmental funding and or private funding, it may be possible to enhance the scheme and further extend the life of the village defences.

Developing the scheme approach

The impacts of the 2013 storm surge led the operators of Bacton Gas Terminal to reassess the erosion risk of the gas infrastructure and to begin a process to identify measures to protect the terminal. Other investigations identified that there was an opportunity to potentially combine terminal protection with improvements for the adjacent coastline.

The following approaches have been considered for the management of the Bacton Terminal and Bacton to Walcott coastal frontage:

APPROACH A

Do Nothing

The Do Nothing approach is a baseline against which all other options will be compared. This approach would involve no further management of the existing defences, ceasing all maintenance and capital expenditure activities and allowing nature to take its course.

DISCOUNTED as an approach but used as a baseline to judge other options

APPROACH B

Continue maintenance of existing defences

This option involves continuing with routine maintenance works to reduce the health and safety risk to the public and retain the structural integrity of the defences where possible.

DISCOUNTED because it is anticipated that a pro-active scheme is viable. However, maintenance of defences will still be necessary alongside any scheme. Realistically this is the approach for the short term if a coastal management scheme cannot be delivered for the villages frontage.

APPROACH C

Continued maintenance and develop a way to help communities adapt to coastal change

As above but also involves activities to seek to help communities manage a changing coastline.

DISCOUNTED because it is anticipated that a pro-active scheme is viable, however, there will still be a need to develop ways to help the community adapt to coastal change in the future.

APPROACH D

Measures to reduce the impact of flooding

This option involves measures to reduce the impacts of flooding from the sea overtopping defences. Some measures have already been put into place (Property Level Protection, Walcott Flood Alleviation Highway Drains), are being delivered (Beach Road Bacton Flood Alleviation Drains) or are being considered further alongside this proposal (e.g. additional Walcott Flood Alleviation drains). This option will not prevent erosion and only benefits those who are impacted by flooding.

FURTHER CONSIDERATION TO BE COMPLETED

APPROACH E

Enhance existing protection

This involves monitoring and maintaining existing defences as well as enhancing/ extending the life of the current defences to keep the protection level the same.

SHORTLISTED Options for this approach are to be explored further – see 'The options'

Long list

A 'long list' of options to deliver the 'Enhance existing protection' approach was considered for the Terminal and Villages. The long lists included schemes which may be considered as desirable, but would not be achievable because they would either not be technically feasible, not be affordable or not be environmentally acceptable.

DISCOUNTED long list options include

- Offshore breakwater
- Rock armour groynes
- New timber groynes
- New sea wall
- Gabion scour protection

Short list

ROCK ARMOUR REVETMENT

This involves placement of rock armour at the toe of the sea wall/cliff to extend the life of existing defences. Rock armour could be placed across the whole frontage or in sections focusing on key locations.

Advantages

- Will dissipate wave energy, reduce beach scour at the base of the sea wall and support the wall as the beach lowers.
- Can be designed to provide a high level of protection to cliffs.
- Will extend the life of the existing defences
- Requires little maintenance
- Can be repositioned if displaced or required elsewhere
- Can be designed with relative certainty

Disadvantages

- Will prevent sediment from cliff entering environment - potentially altering coastal processes.
- Large-scale placement is not compliant with the Shoreline Management Plan
- Rock placement is not desirable near gas infrastructure
- Any remaining dry beach is likely to disappear
- Typically, rock is not used in the area - change in aesthetics
- Potential health and safety risk - people climbing on rocks
- Difficulties in public beach access

BEACH NOURISHMENT/SANDSCAPING SCHEME

This involves placement of additional sediment across the Bacton Terminal/ Bacton to Walcott frontage in order to raise beach levels to extend the life of the defences and protect the gas infrastructure. Sandscaping is a term that is being used to describe a very large scale sand placement.

Advantages

- Will dissipate wave energy and protect existing defences
- Will extend the life of the existing defences
- Is suitable to protect gas infrastructure
- Compliant with the Shoreline Management Plan
- Likely to improve beaches in neighbouring frontages
- Improved public access and beaches for recreation

Disadvantages

- Less certainty as to scheme performance (e.g. how long it will last), although the Dutch Sand Motor has over performed since placement in 2011

The options

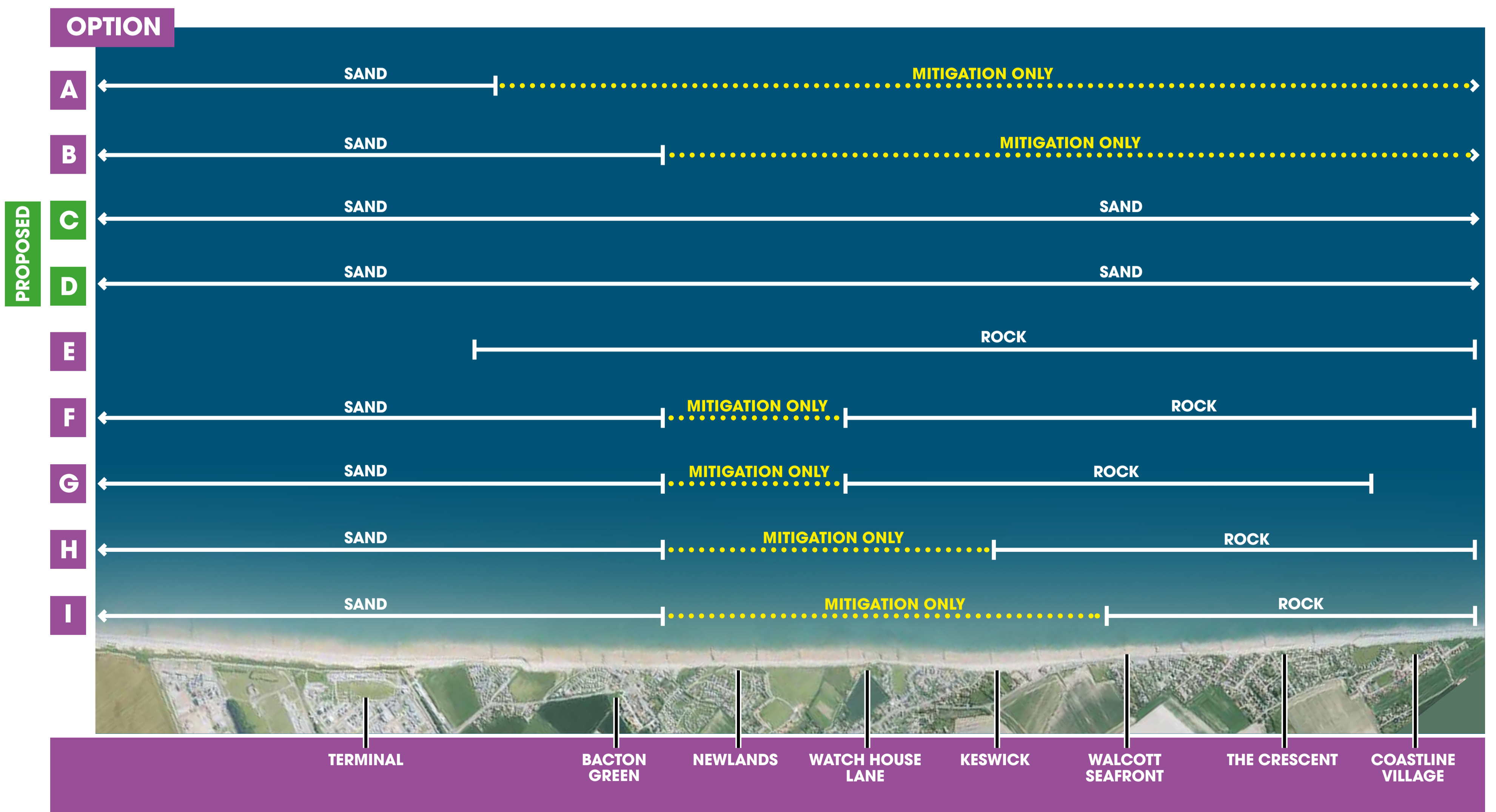
OPTION A		Terminal Protection only with mitigation to prevent acceleration of falling down drift beach level trend - estimated at 1 million m2 of sand					
Estimated total Scheme cost (£M)	12.2	Estimated total villages scheme costs (£M)	0				
Estimated Environment Agency Funding	0	Other funding secured for Sandscaping - NNDC, Local Levy, Natural Flood Management (not confirmed for rock) (£M)	0				
		Funding Gap (£M)	Not Applicable				
Anticipated defence life from 2017 (years)							
Seagulls Field	Bacton Green	Newlands Estate	Watchhouse Lane	Keswick	Walcott Seafront	The Crescent, Walcott	Coastline Village
0	5	5	5	15	5	5	0
DISCOUNTED: This approach is considered technically feasible, environmentally acceptable and financially viable to protect the Terminal. However, it is considered that a more advantageous scheme is possible.							

OPTION B		Terminal and Bacton Village sediment placement only – estimated at 1.2 million m3					
Estimated total Scheme cost (£M)	14.4	Estimated total villages scheme costs (£M)	2.3				
Estimated Environment Agency Funding	0.6	Other funding secured for Sandscaping - NNDC, Local Levy, Natural Flood Management (not confirmed for rock) (£M)	1.1				
		Funding Gap (£M)	0.6				
Anticipated defence life from 2017 (years)							
Seagulls Field	Bacton Green	Newlands Estate	Watchhouse Lane	Keswick	Walcott Seafront	The Crescent, Walcott	Coastline Village
29	50	9	5	16	5	5	0
DISCOUNTED: This approach is considered technically feasible, environmentally acceptable and financially viable due the villages funding gap potentially being met by the Bacton Terminal Operators. However, it is considered that a more advantageous scheme is viable.							

OPTION C		Proposal- Sandscaping Scheme estimated at approximately 1.5 million m3 of sand.					
Estimated total Scheme cost (£M)	17.9	Estimated total villages scheme costs (£M)	5.7				
Estimated Environment Agency Funding	3.4	Other funding secured for Sandscaping - NNDC, Local Levy, Natural Flood Management (not confirmed for rock) (£M)	1.1				
		Funding Gap (£M)	1.2				
Anticipated defence life from 2017 (years)							
Seagulls Field	Bacton Green	Newlands Estate	Watchhouse Lane	Keswick	Walcott Seafront	The Crescent, Walcott	Coastline Village
34	50	39	30	50	26	19	7
PROPOSED: This approach is considered technically feasible, environmentally acceptable and financially viable due the villages funding gap potentially being met by the Bacton Terminal Operators.							

OPTION D		Proposal - Sandscaping Scheme (enhanced)					
Estimated total Scheme cost (£M)	19.3	Estimated total villages scheme costs (£M)	7.1				
Estimated Environment Agency Funding	4.2	Other funding secured for Sandscaping - NNDC, Local Levy, Natural Flood Management (not confirmed for rock) (£M)	1.1				
		Funding Gap (£M)	1.8				
Anticipated defence life from 2017 (years)							
Seagulls Field	Bacton Green	Newlands Estate	Watchhouse Lane	Keswick	Walcott Seafront	The Crescent, Walcott	Coastline Village
36	50	50	50	50	40	26	10
PROPOSED (conditional): This approach is considered technically feasible, environmentally acceptable and has the potential to be financially viable with further governmental and or private contributions to the villages funding gap.							

Aerial perspective of the options listed above and right



OPTION E		Stand-alone rock placement scheme for Bacton village to Coastline village						
Estimated total Scheme cost (£M)	10.9	Estimated total villages scheme costs (£M)						10.9
Estimated Environment Agency Funding	5.1	Estimated additional funding (not secured) - NNDC, Local Levy (£M)						1.0
		Funding Gap (£M)						4.8
Anticipated defence life from 2017 (years)								
Seagulls Field	Bacton Green	Newlands Estate	Watchhouse Lane	Keswick	Walcott Seafront	The Crescent, Walcott	Coastline Village	
29	50	50	50	50	50	50	50	
DISCOUNTED: This scheme is not financially viable as a funding gap remains and it is likely to raise concerns regarding wider coastal impacts.								

OPTION F		Option B + rock placement from Watchhouse Lane to Coastline Villages						
Estimated total Scheme cost (£M)	21.7	Estimated total villages scheme costs (£M)						9.5
Estimated Environment Agency Funding	5.0	Other funding secured for Sandscaping - NNDC, Local Levy, Natural Flood Management (not confirmed for rock) (£M)						1.1
		Funding Gap (£M)						3.4
Anticipated defence life from 2017 (years)								
Seagulls Field	Bacton Green	Newlands Estate	Watchhouse Lane	Keswick	Walcott Seafront	The Crescent, Walcott	Coastline Village	
29	50	9	50	50	50	50	50	
DISCOUNTED: This scheme is not financially viable as a funding gap remains and it is likely to raise concerns regarding wider coastal impacts.								

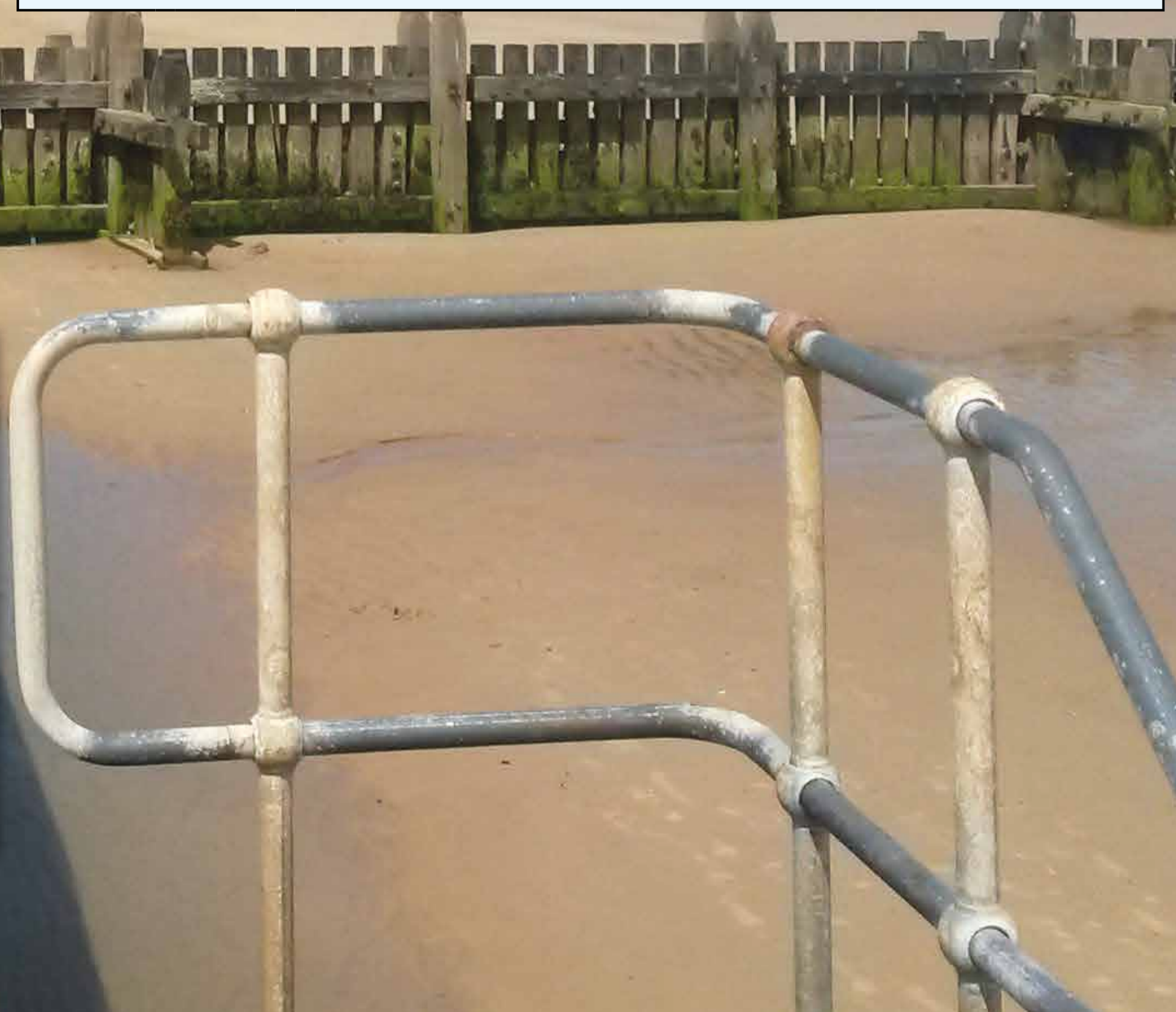
OPTION G		Option B + rock placement from Watchhouse Lane to Ostend Gap						
Estimated total Scheme cost (£M)	20.2	Estimated total villages scheme costs (£M)						8.0
Estimated Environment Agency Funding	3.8	Other funding secured for Sandscaping - NNDC, Local Levy, Natural Flood Management (not confirmed for rock) (£M)						1.1
		Funding Gap (£M)						3.2
Anticipated defence life from 2017 (years)								
Seagulls Field	Bacton Green	Newlands Estate	Watchhouse Lane	Keswick	Walcott Seafront	The Crescent, Walcott	Coastline Village	
29	50	9	50	50	50	50	0	
DISCOUNTED: This scheme is not financially viable as a funding gap remains and it is likely to raise concerns regarding wider coastal impacts.								

OPTION H		Option B + rock placement Rudrams Gap to Coastline Village						
Estimated total Scheme cost (£M)	20.2	Estimated total villages scheme costs (£M)						8.0
Estimated Environment Agency Funding	4.7	Other funding secured for Sandscaping - NNDC, Local Levy, Natural Flood Management (not confirmed for rock) (£M)						1.1
		Funding Gap (£M)						2.2
Anticipated defence life from 2017 (years)								
Seagulls Field	Bacton Green	Newlands Estate	Watchhouse Lane	Keswick	Walcott Seafront	The Crescent, Walcott	Coastline Village	
29	50	9	5	50	50	50	50	
DISCOUNTED: This scheme is not financially viable as a funding gap remains and it is likely to raise concerns regarding wider coastal impacts.								

OPTION I		Option B + rock placement Walcott Seafront to Coastline Village						
Estimated total Scheme cost (£M)	19.3	Estimated total villages scheme costs (£M)						7.1
Estimated Environment Agency Funding	4.5	Other funding secured for Sandscaping - NNDC, Local Levy, Natural Flood Management (not confirmed for rock) (£M)						1.1
		Funding Gap (£M)						1.5
Anticipated defence life from 2017 (years)								
Seagulls Field	Bacton Green	Newlands Estate	Watchhouse Lane	Keswick	Walcott Seafront	The Crescent, Walcott	Coastline Village	
29	50	9	5	16	50	50	50	
DISCOUNTED: This scheme is not financially viable as a funding gap remains and it is likely to raise concerns regarding wider coastal impacts.								

Key Message

The proposed option(s) still requires approvals such as a Marine Licence and Planning Consent, this will include consideration of impacts to environmentally designated sites.



Proposal

The existing defences at the Terminal, Bacton and Walcott were designed at a time when there was a larger and higher beach. The beach is very important in defending the coast as it helps to absorb the energy of the waves before they reach the cliff or defences. Over the years the beach levels have reduced across the east coast; this is caused by natural processes that have been ongoing since the last Ice Age, but their impact is exacerbated by the presence of extensive coastal defences preventing materials from the cliffs replenishing the beaches. These reduced beach levels mean that the defences and cliffs are exposed more often to waves, which increases the likelihood of further reducing beach levels, causing defences to fail (e.g. collapsing) and cliffs to erode.

The proposed scheme seeks to put back the beach that has been eroded over the years in order to provide natural protection for a period of time. The idea is based on an approach used by the Dutch 'Sand Motor' (also known as Sand Engine) which is located on the coast between Hook of Holland and The Hague, The Netherlands. This Dutch scheme has been very successful.

The proposal seeks to deliver a total of approximately 1.5 million m³ of sand between a location approximately 300m west of the terminal to Coastline Village; this could be enhanced if funding is available and it is technically feasible.

The highest and widest part of the scheme (the head) will be located in front of the terminal to provide the level of protection required for this national asset and will be funded by the terminal operators. The remaining sediment will form a tail from the terminal across the villages frontage. For this additional sediment, a number of funding sources have been found.

The 'head' of sand is designed to erode over time and natural processes will move the sand predominantly along the Bacton to Walcott coastline, replenishing those beaches and continuing to provide protection. The sediment over time will be moved by the sea, this may also benefit communities further down the coast in future years.

Please view the visualisation of the scheme at northnorfolk.gov.uk or in the display.

Key Message

By increasing beach levels it is expected that existing defences will last longer.

Where will the sand come from and how is it put on the beach?

The sand will come from an existing sand extraction site located in the North Sea. These sites are regulated and prior to licensing undergo extensive assessment to ensure that the extraction will not have an impact on coastal erosion.

The sand is extracted by a dredging vessel (large ship) which then transports the sand to the coast where it is to be placed. The sand is then pumped ashore through a large pipe and spread on the beach to the specified design. Please see the film of this approach where it has been completed in Lincolnshire <https://vimeo.com/155092154>. This operation takes advantage of every tide and is completed day and night.

Making the proposal better

There is an opportunity to improve the proposal to enhance the expected life of the defences of the villages and the terminal.

This could be achieved by:

- Increasing the volume of sand placed on the beach should additional funding be available
- Increasing the size of the grains of sand placed, slowing beach movement and extending the life of the defences further.

Please let us know your thoughts and help us identify ways in which additional funding may be found. Examples that have been considered elsewhere include additional Parish Precept contributions and supplemental local caravan pitch fees.

Environmental Impact Assessment

A thorough Environmental Impact Assessment (EIA) will be undertaken in order to address the potential for impacts occurring during and as a result of the scheme in operation.

The EIA, in summary, is to include the following aspects:

- Description of Proposed Scheme;
- Alternatives considered and reasons for selection of preferred option;
- Baseline environmental characteristics;
- Results of consultation exercises held during scoping (completed) and EIA phase (current);
- Assessment of Impacts (refer to scoping list of potential issues);
- Measures recommended to reduce any significant impacts;
- Remaining Impacts following successful implementation of recommended measures;
- Consideration of potential for cumulative (in combination with other projects) impacts.

The EIA will include potential changes to and Impacts on the following parameters:

- Coastal processes;
- Marine water and sediment quality;
- Nature Conservation Designations;
- Geological resources;
- Coastal erosion and flooding;
- Benthic (seabed) and coastal ecology;
- Fish ecology;
- Marine mammals;
- Ornithology (birds);
- Landscape;
- Commercial and recreational navigation;
- Commercial and recreational fisheries;
- Archaeology and historic environment;
- Local community and tourism (including changes to sound levels);
- Traffic;
- Air quality;
- Services and other users of the sea.

The EIA process will result in the production of an Environmental Statement, specific to the project which will be made available for public consultation. The publication of this document will be advertised and responses will be considered prior to decisions being made to consent and licence the proposed scheme.

So far the scoping phase of the EIA has been completed which involves some consultation, identification of the key potential impacts and gathering of known information. The scoping report is available at www.northnorfolk.gov.uk.

We are currently undertaking a wider consultation of potentially interested people and groups and would therefore welcome any opinions that you may have on the proposed scheme as outlined in the information provided.

Please provide your response by filling in a questionnaire or online at www.northnorfolk.gov.uk. Your views will then be considered during the EIA phase which has now commenced.

Key Message

Now is your chance to provide information to help inform the scheme.

Contributions towards the scheme

The Proposal will rely on funding from the Bacton Terminal Operators and National Flood and Coastal Erosion funding.

National Flood and Coastal Erosion funding will often cover only part of the scheme costs, and in such cases it needs to be supported by local contributions towards the scheme. If any gap is not filled by local contributions, national funds won't be provided either. Contributions to the scheme or future maintenance can be financial or 'in kind'.

- North Norfolk District Council has committed £500,000 towards the construction of the scheme.
- The Regional Flood and Coast Defence Committee (Eastern) through the Local Levy has committed £500,000.
- The National Natural Flood Management Fund has committed £120,000
- The Terminal is willing to consider to meet the villages funding gap for the proposed Option C subject to NNDC leading the delivery of the scheme.

How can you help?

The community can offer to help the scheme and this 'contribution' can be included in the case for Government funding, this could help enhance the scheme.

Contributions can be in kind or financial. Even if a contribution is small, it will help to demonstrate local support. A Just Giving site has been set up as a secure and easy way to help, please see www.justgiving.com/crowdfunding/bactontowalcottsandscaping.

If you are not able to support the scheme financially, any information provided through the questionnaire, or support during public consultations, would be helpful.

What will happen next?

NNDC will be setting up a Local Liaison Group – with invitations to Members of the Parish Councils, District Councillors, Local Fishing Fraternity and Local Businesses. The liaison group will help to keep people informed, ensure local knowledge and feedback is included and ensure that the scheme is sensitive to local circumstances. Please fill in a contact card if you are interested.

The scheme will require an Environmental Impact Assessment. Any comments or information that you provide will help with assessing issues and ensure that any additional opportunities are considered before any consents and licences are sought.

The scheme will continue to be fine-tuned in order to maximise benefits, minimise any potential environmental impacts, increase certainty of success and reduce costs.

During the consenting process, preparations will be made to identify a contractor who can construct the scheme. If all goes well, construction may be possible in late summer 2018, if there are any delays this is likely to be later, the next earliest date would be late spring 2019. Construction is expected to take between 2 and 4 months.

Would you like to be kept informed?

If you would like to be kept informed about the Scheme, please email **coastal.management@north-norfolk.gov.uk** or fill in a contact card next to this display and pass to a member of staff.

Frequently Asked Questions

Q. Will the scheme happen?

A. The proposed scheme is still developing and requires a number of parties to commit to funding. The scheme also needs a number of consents and licences which will need to be sought. Arranging all these is ongoing.

Q. Will the scheme benefit communities further down drift?

A. It is anticipated that the coast to the east of the placement will benefit as the sediment moves, over time, down the coast.

Q. Will the placement of sand displace the sea and create increased pressures elsewhere?

A. No, the North Sea is very large and the placement of sand will not increase sea levels elsewhere.

Q. How does the scheme work?

A. Beaches are the best and first form of defence. A good, high gently sloping beach absorbs the energy of waves and protects cliffs and sea defences from damage. By increasing the level of beaches the terminal assets can be protected and the life of the defences in front of the villages can be extended. As the placed sand erodes from the terminal, much of it will move along the coast to continue to supplement the beaches of the villages.

Q. Will the sand all wash away in one storm?

A. No, the scheme has been designed and modelled with expert engineers. It is expected that after placement beach levels will change quite quickly as the coast adjusts and the sediment settles. Beach levels will still fluctuate and in storm events, as would be expected, some sediment will be eroded. Conversely during clement weather there will be more sand in the 'system' which will help rebuild beaches. The placement at the Terminal is very large, a severe storm would not have the energy to remove all this sediment in one event. The placement at Bacton and Walcott could be impacted in a large storm, but, new sediment will also have been released from the terminal which in turn will replenish these beaches during more clement weather. This is also confirmed by the monitoring of the Dutch Sand Engine, which went through the same December 2013 North Sea storm that caused flooding and erosion here.

Q. Where will the sand come from?

A. The sand will be extracted from an area offshore which is already licenced for extraction purposes.

Q. Does dredging cause coastal erosion.

A. Coastal erosion has been happening on the Norfolk coast since the end of the last ice age, it is natural. Locations where sediment is dredged are subject to licences which involve consents with

environmental assessments. This includes consideration as to if the operation will exacerbate coastal erosion. The sediment for this scheme will come from one of these licenced sites, likely to be either off Great Yarmouth or Lincolnshire.

Q. Surely dredged areas are filled in by the sea, where would that sand come from?

A. The dredge sites off Great Yarmouth are relic river beds, once dredged they do not fill in like holes in the beach, but over time they recolonise with marine species.

Q. How long would it take to place all the sand if the scheme happens?

A. It is estimated that the scheme would take approximately 3 – 4 months to construct.

Q. When would the sand be placed?

A. If the scheme goes ahead, the sand would be placed as soon as possible. If all goes well this could be late summer 2018, the next available date would be spring 2019. It would need to be completed in the spring or summer to make use of good weather and calmer seas. Once the scheme starts, the vessels delivering the sand would work every high tide, day and night.

Q. Could the villages part of the scheme happen without the Terminal Protection Scheme?

A. No. The combined scheme with the Terminal provides economies of scale and enables cost to be shared, reducing costs for the Villages part. To date no other viable scheme has been identified for the villages.

Q. How is it funded?

The terminal protection will be funded by the terminal operators, not government. The villages part of the scheme will need to be funded by a mix of funding sources, including, North Norfolk District Council, Regional Flood and Coast Committee, Environment Agency and DEFRA. The terminal operators are also willing to consider filling funding gaps (within reason). We are continuing to identify other funding sources including an approach to the Local Enterprise Partnership.

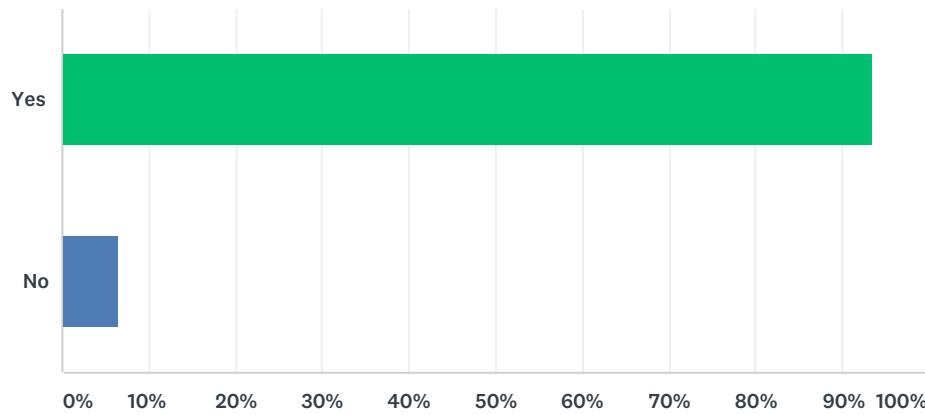
Q. Will there be a local impact on fisheries?

A. The Environmental Impact Assessment will consider the potential for impacts further, however, the information gathered to date has not indicated significant impacts. It is understood that in the past whelks have been harvested off Bacton and this needs to be explored further. Improvements to beach access for launching fishing vessels at Cable Gap have been identified.

Appendix 3 – Summary information from questionnaires

Q1 Do you use the beach area and walkways along the front between Bacton Terminal and Walcott?

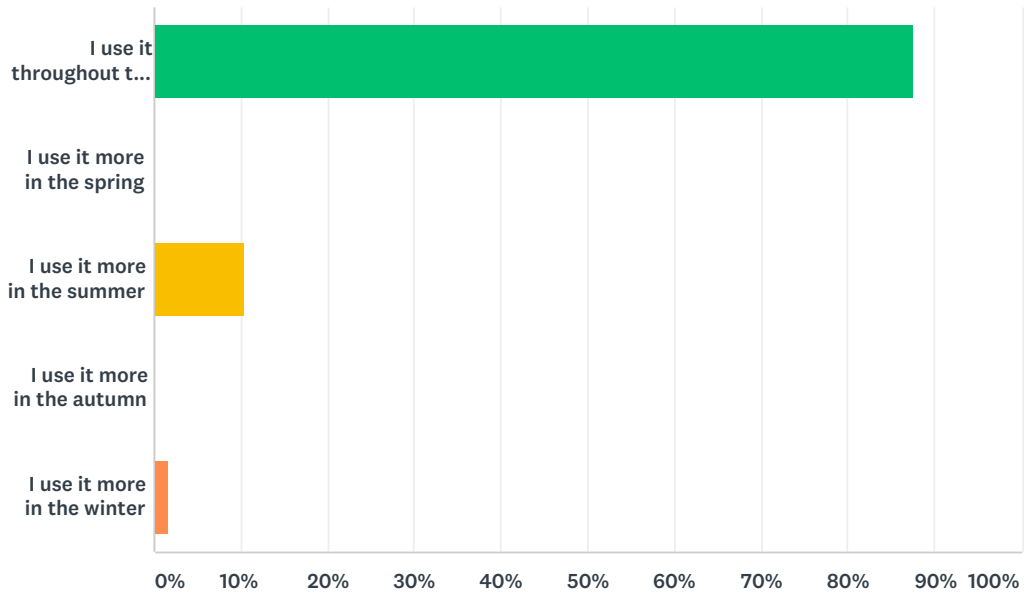
Answered: 155 Skipped: 2



ANSWER CHOICES	RESPONSES	
Yes	93.55%	145
No	6.45%	10
TOTAL		155

Q2 At what time of year do you mainly use the area?

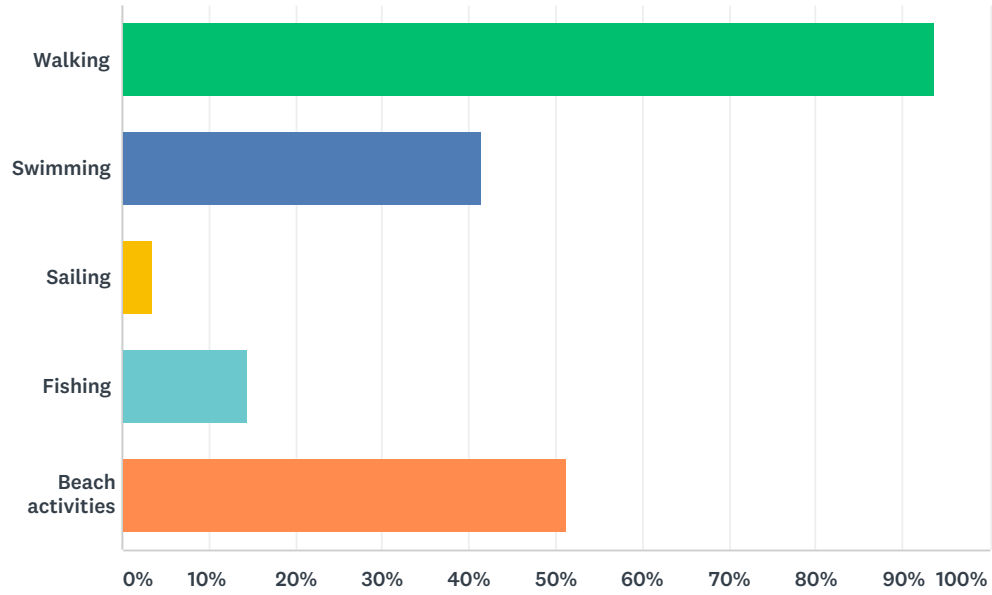
Answered: 114 Skipped: 43



ANSWER CHOICES	RESPONSES	
I use it throughout the year	87.72%	100
I use it more in the spring	0.00%	0
I use it more in the summer	10.53%	12
I use it more in the autumn	0.00%	0
I use it more in the winter	1.75%	2
TOTAL		114

Q3 Please tell us a little bit more about how you use the area

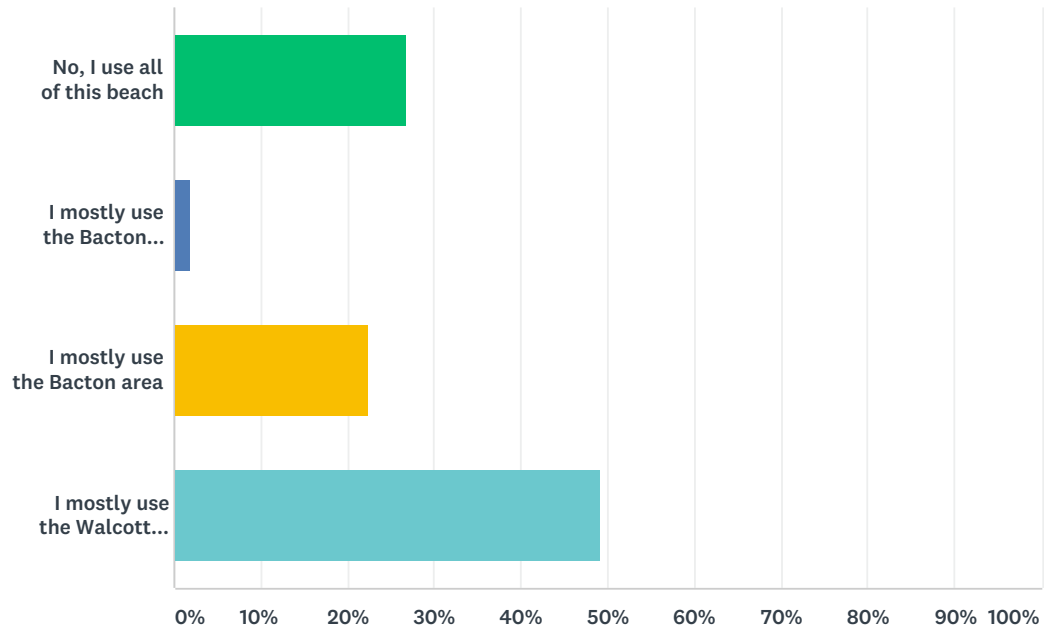
Answered: 111 Skipped: 46



ANSWER CHOICES	RESPONSES	
Walking	93.69%	104
Swimming	41.44%	46
Sailing	3.60%	4
Fishing	14.41%	16
Beach activities	51.35%	57
Total Respondents: 111		

Q4 Do you use a particular stretch of beach?

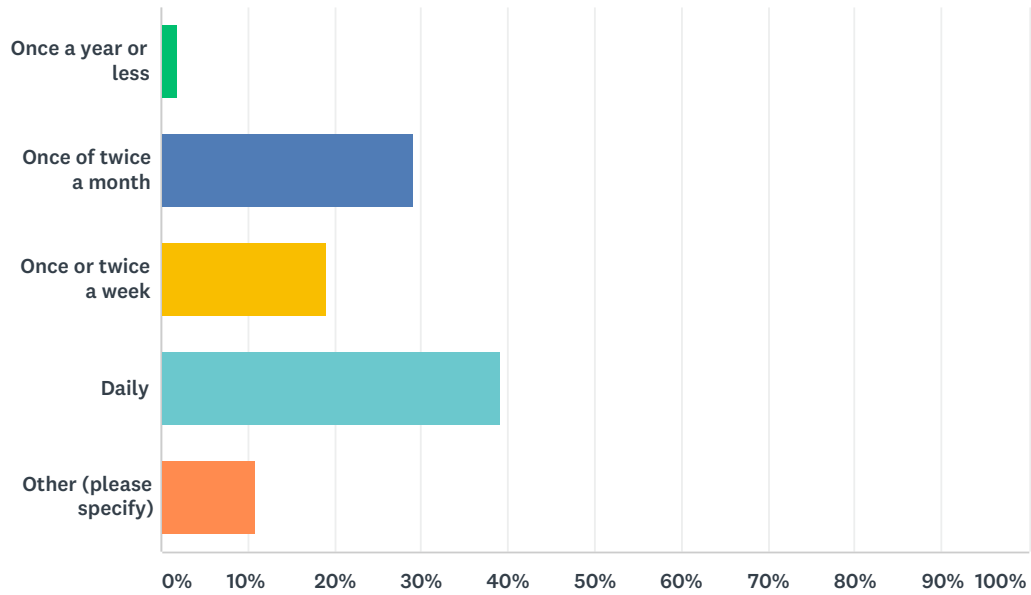
Answered: 112 Skipped: 45



ANSWER CHOICES	RESPONSES	
No, I use all of this beach	26.79%	30
I mostly use the Bacton Terminal area	1.79%	2
I mostly use the Bacton area	22.32%	25
I mostly use the Walcott area	49.11%	55
TOTAL		112

Q5 How often do you use the beach area?

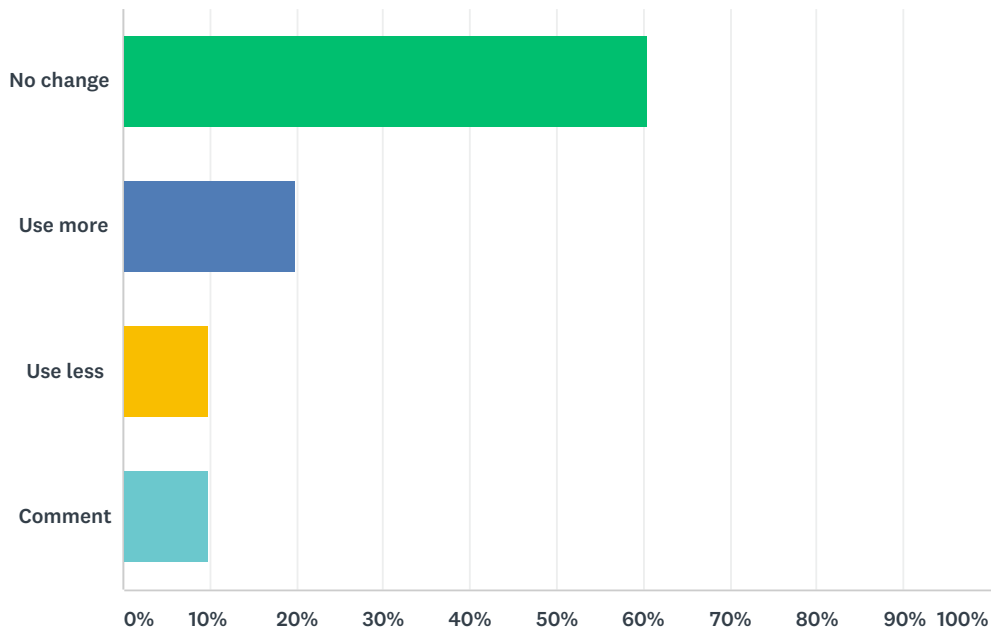
Answered: 110 Skipped: 47



ANSWER CHOICES	RESPONSES
Once a year or less	1.82% 2
Once of twice a month	29.09% 32
Once or twice a week	19.09% 21
Daily	39.09% 43
Other (please specify)	10.91% 12
TOTAL	110

Q6 How would the construction works for the proposed scheme change your use of the beach?

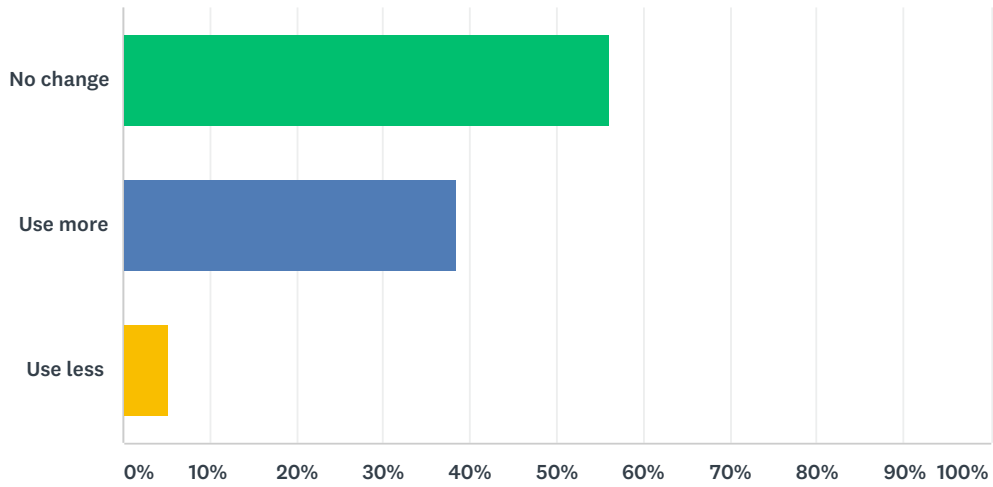
Answered: 111 Skipped: 46



ANSWER CHOICES	RESPONSES	
No change	60.36%	67
Use more	19.82%	22
Use less	9.91%	11
Comment	9.91%	11
TOTAL		111

Q7 How would the final scheme change your use of the beach area?

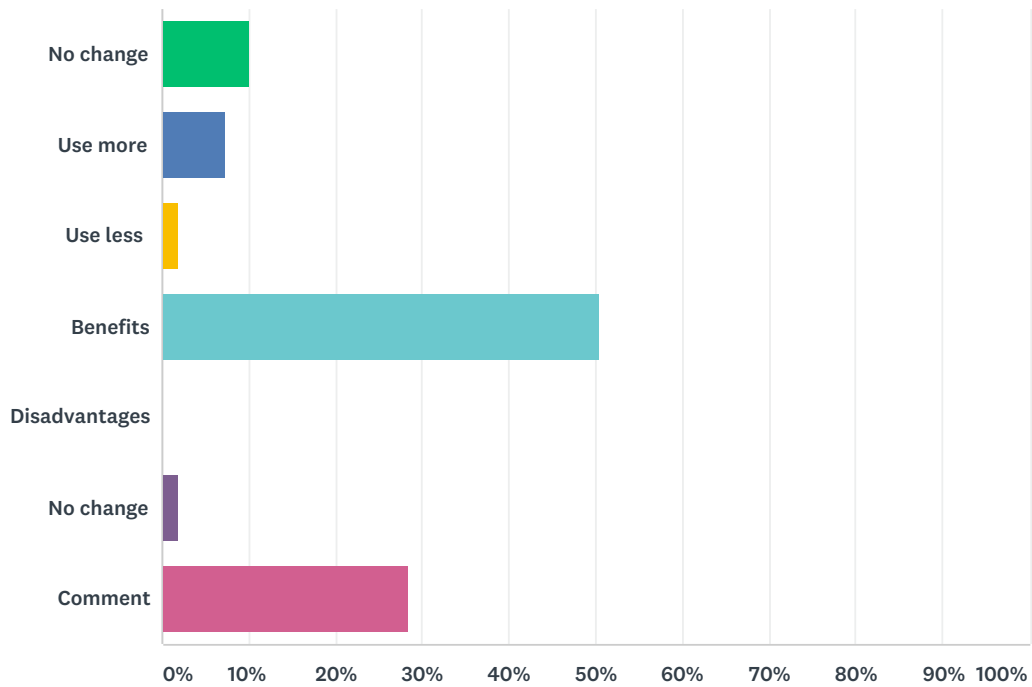
Answered: 114 Skipped: 43



ANSWER CHOICES	RESPONSES	
No change	56.14%	64
Use more	38.60%	44
Use less	5.26%	6
TOTAL		114

Q8 Do you see any benefits or disadvantages with the proposed scheme, please use as much detail as possible.

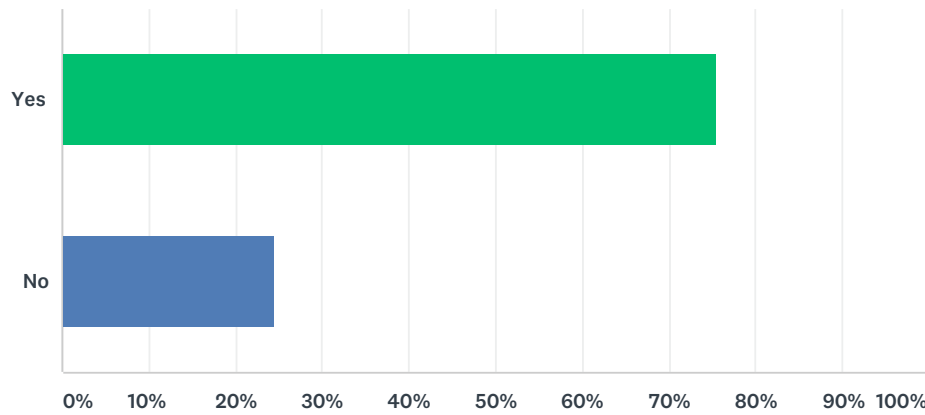
Answered: 109 Skipped: 48



ANSWER CHOICES	RESPONSES	
No change	10.09%	11
Use more	7.34%	8
Use less	1.83%	2
Benefits	50.46%	55
Disadvantages	0.00%	0
No change	1.83%	2
Comment	28.44%	31
TOTAL		109

Q9 Do you want to receive updates about the scheme? If you do please answer question 11 with your contact details

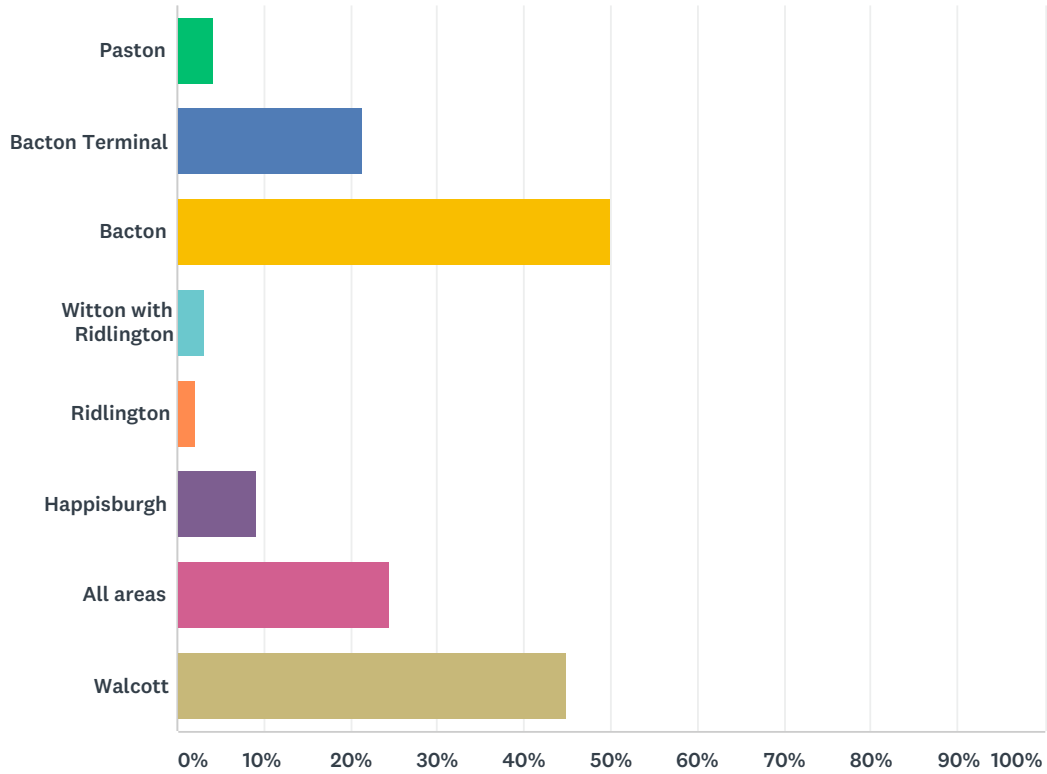
Answered: 90 Skipped: 67



ANSWER CHOICES	RESPONSES	
Yes	75.56%	68
No	24.44%	22
TOTAL		90

Q10 I am mostly interested in

Answered: 98 Skipped: 59



ANSWER CHOICES	RESPONSES
Paston	4.08% 4
Bacton Terminal	21.43% 21
Bacton	50.00% 49
Witton with Ridlington	3.06% 3
Ridlington	2.04% 2
Happisburgh	9.18% 9
All areas	24.49% 24
Walcott	44.90% 44
Total Respondents: 98	

Q11 My contact email is:

Answered: 64 Skipped: 93

Q3 Comments - Please tell us a little bit more about how you use the area?

- Leisure Activities
- Run a business along this stretch
- Meditation, Qi Gong
- monitoring for flood warden duties
- Dog warden / Flood warden
- Member of sail & shore watch
- Tourism + recreation = 70 + years
- Holiday home owner (Watch house Lane Bacton)
- full time fisherman offshore!
- boat launching (small fishing boat)
- kayaking
- paddling not swimming
- Full time crab and lobster fisherman
- fsadf
- Relaxing
- Camping
- hoilday
- Camping
- Running and relaxing on beach with friends
- Camping @ Slate Bungalow
- Camping
- Camping in our motorhome
- Surfing

Q6 Comments - How would the construction works for the proposed scheme change your use of the beach?

- Not possible to answer this as do not know how the area will change. May not be allowed on beach with dog. Has anyone thought where the construction traffic will go.
- Sometimes there is no beach at high tide so cannot use then.
- If it restricted access to the area I use
- While the work is being done it would be unsafe to use, would go again after
- I wont go near construction areas. otherwise no change
- Can't answer - How disruptive will it be?
- sfd
- I wouldn't use it at all ??
- Work round any construction work.
- Depends on how the new beach affects the shape of the waves
- Stop use totally.

Q8 Comments – Do you see any benefits or disadvantages with the proposed scheme?
Please use as much detail as possible.

- Presuming the scheme works, it seems there is no plan for afterwards. Mainly traffic and facilities. Traffic & campervans will increase tremendously. May I respectfully suggest the following: Camper van site on Bacton / Walcott border is reopened. Car park facilities given priority on land opposite beach. Priory road has double yellow lines to prevent road being blocked and used as campervan site. Toilet Facilities provided at Bacton. Speeding restrictions on Bacton motorway.
- As long as this Sandscaping scheme works - We own holiday self-catering units in the Walcott area. We have guests all year round - 52 weeks a year.
- Having seen this scheme piloted in Lincolnshire, when there is an onshore wind sand has been blown in great quantities onto land and gardens which are not normally subjected to drifting sand, thereby posing an ongoing problem of how to deal with this situation.
- Benefits - reduced erosion, possible improvement of beach quantity leading to more tourism - this may be affected by the sand used (coarse / gritty not so acceptable)

Disadvantages - 1. the groyne will be covered changing character of beach. 2. Currently the groyne divide the beach in to areas where dogs can be free and those where they must be on leads. This will be more difficult to enforce without the 'barriers' of the groyne and I fear in time dogs may be restricted on the entire beach - this would also affect tourism as many people stay in Bacton for the dog friendly

- Unsure as you can never tell how long the sand will last. High tide start of July 20174 lost nearly 10ft of sand in 1 section of the beach.
- Rocks preferred but not cheap enough. It won't solve the issue but will hopefully slow it down.
- The North Sea takes part of the beach away every day - more sand will just be taken away again. Needs to be more permanent construction as concrete.
- Walcott is a beautiful area so hopefully will not be spoiled from this change.
- If it works then that will be fantastic and welcome. However I don't have faith that adding sand will last when confronted with the forces of the North Sea. In this event it will be a massive waste of money.
- The beach level fluctuates from day to day. I don't foresee this changing after the work is complete.
- Hoping waves will dissipate before hitting sea wall but concerned how long it will last.
- Do walking may be a problem

- Could make walking along the promenade more difficult on occasion??
- It might be better for us if sand migrates west-ward
- I am a land owner / farmer, opposite the Keswick end of Walcott front. The sea has flooded land 5/6 times since 1997. I hope the scheme gets a goahead. I fully support the idea of sand being pumped on the beach
- I would hope that it would give peace of mind to all of us who live close to the North Sea, especially the families who have experienced flooding of the last few years
- My only concern is how can you guarantee that the sand won't be washed away on high tides, also can a representative come to our parish council meeting?
- For me, I think this is a great plan and would look forward to this work commencing. Fingers crossed! ASAP. Good luck!
- Having seen [Mason Spens](LW?) at first hand the scheme appears to have great promise - especially the protection given to Newlands Estate + Bacton in its entirety.
- While it will not affect my use of the beach area i can see the long term benefits of stopping / slowing down the coastal erosion.
- The Bacton beach may be usable for more time, due to higher levels of sand
- would like to see wildlife areas established to encourage birds & seals
- Sounds great so lets see it happen
- would the raising of the level of the sand on the beach help in preventing flooding when there is a tidal surge? would it not make the tidal surge higher so comes over the wall at Walcott more often.
- Im a full time fisherman. I live at Happisburgh. Fish for crab and lobster, Im worried about the plom smothering the ground when they pump the sand on to the beach. Plus the work boat going to and from Bacton / Walcott. Where our gear is. Thanks Gavin Watling.
- Sfdsf
- I would no longer visit the area ??
- ???
- Traffic
- Any thing to protect the coastal villages is a must
- Could bring better use of the beach by locals and visitors as sometimes the sand level too low to get from path down to beach.
- The area will be better protected which can only be a fantastic improvement meaning it can be loved and used for longer

- It'll help protect Walcott. Other than that I'm not qualified to ascertain the long term benefits.
- With longshore drift I can't see it staying around for to long a big storm will soon move it. The time it is there what are the environment costs going to be at other points of the cost??
- Quieter with reduced slamming/ banging of the waves crashing on the sea wall when trying to sleep. Reduced propeller vibrations from the ships during the night. Better fishing, wildlife, bats, birds, including seals, safer as the concrete with metal reinforcing on the beach is dangerous as the level is so low, more recreational activities such as photography, walking, swimming, kayaking, paddle boarding, plus better access for the disabled . There would also be reduced maintenance costs for NNDC of the sea wall if Option D was chosen, plus County and District would save money from clean up costs from sea surges and the destruction caused and negative press. Bacon gas would also benefit with protection of the trading of gas via the European pipelines, and tourism and the fresh air would benefit residents and tourists.
- The front would be ruined. Soft dirty sand, no good for walking. All the dog crap would not be washed away. An expensive poor solution. It just needs an extension of the works already carried out at the gas terminal with offshore reef like Sea Palling. Protect the base of the cliff and correct the angle of repose. Best solution without doubt and cheaper.

NEWS RELEASE



07 September 2017

Bacton to Walcott Development Agreement Signed

Today North Norfolk District Council, Perenco UK and Shell UK have signed a Development Agreement to mark the official launch of the major coastal Bacton to Walcott Sandscaping Scheme.

The official signing took place today, Thursday 7 September, at 2pm following a tour of the Bacton Gas Terminal, Bacton and Walcott villages. During the tour, attendees were briefed about the project by officers from North Norfolk District Council and scheme consultants Royal HaskoningDHV.

Cllr Tom FitzPatrick, Leader of North Norfolk District Council said: “This is a vitally important project for the UK and our east coast. We are proud to be working closely with Bacton Gas Terminal operators, Shell UK and Perenco, to enable this project to move forwards.”

Sinead Lynch, Shell UK Country Chair, said: “Shell UK is proud to be a partner in this innovative sand-scaping scheme, which will help to protect this part of the Norfolk coastline.

“The Bacton Gas Terminal is an important energy asset for the UK, and we look forward to working with North Norfolk District council, the UK government and Bacton and Walcott communities, to ensure that we can realise the local and national benefits of the scheme.”

Laurent Combe, the Perenco UK General Manager, said: “We are pleased to have the opportunity to work with North Norfolk District Council and the local communities on this innovative project to help reduce the flood risk at Bacton and Walcott whilst also securing key national infrastructure at the Bacton Terminal.”

Emma Howard Boyd, Chair of the Environment Agency, said: “There is a lot to learn from the Bacton to Walcott scheme. It innovatively uses natural processes to reduce coastal flood and erosion risk, and it demonstrates the added value of organisations working in partnership to fund better coastal protection for the local community as well as this critical gas terminal.”

Community drop-in sessions were held in July to share more information about the proposals. As well as holding the drop-in sessions people have been invited to demonstrate community support for the project through the JustGiving [page](#), and register to receive regular email updates on the project.

The next stage of the project will see a thorough Environmental Impact Assessment carried out before applications for consents and licenses are submitted.

Cllr John Lee, North Norfolk District Council Cabinet Member for Coastal Management said: “This is a significant project for the communities in Bacton and Walcott and our focus will be on keeping people informed and engaged as we seek the relevant permissions and approvals.”

The proposal relies on funding from a number of sources including the Bacton Terminal Operators and National Flood and Coastal Erosion Funding.

NNDC has committed £500,000 to the construction of the scheme; the Regional Flood and Coast Defence Committee (Eastern) through the local levy has committed £500,000; the National Natural Flood Management Fund has committed £120,000.

For more information please see <https://www.north-norfolk.gov.uk/sandscaping>

ENDS

Note to Editors:

1. Bacton Gas Terminal processes up to one third of the UK gas supply.
2. Monitoring confirms that over the past 10 years on average beach levels on this frontage have been falling.
3. The Dutch use sediment extracted from their national waters for coast protection every year. In 2014 the Dutch extracted 40.4 million cubic meters of aggregate from their waters for coast protection purposes. In contrast 1.5 million tonnes were extracted by the UK in 2014 for coast protection purposes (source: International Council for the Exploration of the Sea WGEXT Report 2015). Sandscaping makes use of natural processes to feed and redistribute sediment to a coastline to meet flood and coastal erosion management objectives, while at the same time generating additional social, economic and environmental benefits; therefore it is environment friendly and sustainable.
4. Extraction of sediment from the North Sea is highly regulated, as such environmental factors such as fisheries, flora and fauna and coastal processes are all considered as part of the marine licensing process.
5. The Crown Estate: The Crown Estate has responsibilities for most of the seabed (around England, Wales and Northern Ireland) to 12 nautical miles. It manages almost all of the sand and gravel resources lying off of the coast and is responsible for awarding and managing commercial agreements for companies to extract it.
6. North Norfolk District Council’s Local Ward Councillors are Cllr Barry Smith on 01263 722103, Cllr Wyndham Northam on 01263 721599 and Cllr Lee Walker on 01692 651482.
7. In April 2016 a deputation from NNDC, Bacton Terminal Operators, and Norman Lamb MP attended a meeting at the Cabinet Office, 9 Downing Street, outlining the importance of the project and the need for national funding.

For more information please contact the Media Team media@north-norfolk.gov.uk on 01263 516344 or 01263 516059.